8. (New) A rotating table apparatus having a driven shaft supported by a housing and driven by a driving means and a rotating table which is rotatingly driven by said driven shaft using a cam and cam followers;

wherein the rotating table apparatus has an opposing surface which opposes an end surface of the rotating table in a direction along a rotation shaft of said rotating table, there is invariably provided a space between said opposing surface and said end surface and oil intervenes in said space.

- 9. (New) A rotating table apparatus according to Claim 8 wherein said space is 0.005 mm or more and 0.2 mm or less.
- 10. (New) A totating table apparatus according to Claim 9 wherein said opposing surface is a part of said housing.
- 11. (New) A rotating table apparatus according to Claim 10 wherein oil for lubricating said cam and said cam followers is provided in said housing and a portion of oil intervenes in said space.
- 12. (New) A rotating table apparatus according to Claim 11 wherein said cam is a roller gear cam and said rotating table intermittently rotates.
- 13. (New) A rotating table apparatus according to Claim 12 wherein a tool is provided in said rotating table.

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